Case Study

Bentotex® GCL 50 Ekotex® 20 Geotextile

Wildlife Habitat Pond

As part of the enabling works across the central section of HS2, it was identified that alternative habitat must be created for wildlife along the proposed route of the new high speed rail project. This includes the creation of aquatic habitat for amphibious creatures such as the protected great crested newts.

HS2 designers had determined five possible lining solutions for ecological mitigation sites including bentonite liners. Geosynthetics Ltd proposed the use of Bentotex® GCL with a 300mm surcharge material to form the liner for the pond. Ekotex® 20 non woven geotextile was proposed as a protection fleece for use above and below the liner to prevent damage during installation.

The Bentotex® liner allowed the installation of the pond without the requirement of specialist welding teams. The use of Bentotex® liners also allowed the contractor to achieve a green edge solution ensuring that the lining system would not be exposed as water levels fluctuate. Geosynthetics Ltd were able to dispatch both liner and protection fleece on a single vehicle from stock reducing the number of vehicle movements required on site.

Using Bentotex® GCL allowed Forkers to complete the installation of the pond liner without employing any specialist installation teams, which allowed the use of site won soils for the surcharge material ensuring export of soils to landfill was minimised.

John Ascroft - Site Agent